WHAT IS CLAIMED IS:

1. A method for reducing a condition associated with fetal alcohol syndrome in a subject who is exposed to alcohol *in utero*, the method comprising administering to the subject an ADNF polypeptide in an amount sufficient to reduce the condition associated with fetal alcohol syndrome.

2. The method of claim 1, wherein the ADNF polypeptide is a member selected from the group consisting of a full length ADNF I polypeptide, a full length ADNF III polypeptide, and a combination of a full length ADNF I polypeptide and a full length ADNF III polypeptide.

3. The method of claim 1, wherein the ADNF polypeptide is a member selected from the group consisting of:

(a) an ADNF I polypeptide having the following amino acid sequence: $(R^1)_x$-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala-$(R^2)_y$ (SEQ ID NO:3);

(b) an ADNF III polypeptide having the following amino acid sequence: $(R^3)_w$-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-$(R^4)_z$ (SEQ ID NO:4); and

(c) a combination of the ADNF I polypeptide of part (a) and the ADNF III polypeptide of part (b);

wherein R^1, R^2, R^3, and R^4 are independently selected and are an amino acid sequence comprising from 1 to about 40 amino acids wherein each amino acid is independently selected; and

x, y, w, and z are independently selected and are equal to zero or one.

4. The method of claim 3, wherein for the ADNF I polypeptide x and y are both zero. - Seq ID NO: 1

5. The method of claim 3, wherein for the ADNF I polypeptide:

x is one;

R^1 is Val-Leu-Gly-Gly-Gly (SEQ ID NO:5); and

y is zero. (SEQ ID NO:21)

6. The method of claim 3, wherein for the ADNF I polypeptide:

x is one;

R^1 is Val-Glu-Glu-Gly-Ile-Val-Leu-Gly-Gly-Gly (SEQ ID NO:6); and

y is zero. (SEQ ID NO:22)

7. The method of claim 3, wherein for the ADNF III polypeptide w and z are both zero. Seq ID NO:2

8. The method of claim 3, wherein for the ADNF III polypeptide:
w is one;
R^3 is Gly-Gly; and
z is zero. (SEQ ID NO:23)

9. The method of claim 3, wherein for the ADNF III polypeptide:
w is one;
R^3 is Leu-Gly-Gly;
z is one; and
R^4 is Gln-Ser. (SEQ ID NO:24)

10. The method of claim 3, wherein for the ADNF III polypeptide:
w is one;
R^3 is Leu-Gly-Leu-Gly-Gly (SEQ ID NO:7);
z is one; and
R^4 is Gln-Ser. (SEQ ID NO:25)

11. The method of claim 3, wherein for the ADNF III polypeptide:
w is one;
R^3 is Ser-Val-Arg-Leu-Gly-Leu-Gly-Gly (SEQ ID NO:8);
z is one; and
R^4 is Gln-Ser. (SEQ ID NO:26)

12. The method of claim 3, wherein the ADNF polypeptide is a combination of the ADNF I polypeptide of part (a) and the ADNF III polypeptide of part (b).

13. The method of claim 12, wherein x, y, w, and z are all zero. (SEQ ID NOS: 1 and 2)

14. The method of claim 3, wherein at least one of the ADNF polypeptide is encoded by a nucleic acid which is administered to the subject.

15. The method of claim 1, wherein the condition is a decreased body weight of the subject.

16. The method of claim 1, wherein the condition is a decreased brain weight of the subject.

17. The method of claim 1, wherein the condition is a decreased level of VIP mRNA of the subject.

18. The method of claim 1, wherein the condition is death of the subject *in utero*.

19. A method for reducing neuronal cell death, the method comprising contacting a neuronal cell with a combination of an ADNF I polypeptide and an ADNF III polypeptide in an amount sufficient to reduce neuronal cell death.

20. The method of claim 19, wherein the ADNF I polypeptide is a full length ADNF I polypeptide and the ADNF IIII polypeptide is a full length ADNF III polypeptide.

21. The method of claim 19 wherein:

(a) the ADNF I polypeptide has the following amino acid sequence: $(R^1)_x$-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala-$(R^2)_y$ (SEQ ID NO:3); and

(b) the ADNF III polypeptide has the following amino acid sequence: $(R^3)_w$-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-$(R^4)_z$ (SEQ ID NO:4);

wherein R^1, R^2, R^3, and R^4 are independently selected and are an amino acid sequence comprising from 1 to about 40 amino acids wherein each amino acid is independently selected; and

x, y, w, and z are independently selected and are equal to zero or one.

22. The method of claim 21, wherein for the ADNF I polypeptide x and y are both zero.

23. The method of claim 21, wherein for the ADNF I polypeptide:

x is one;

R^1 is Val-Leu-Gly-Gly-Gly (SEQ ID NO:5); and

y is zero. (SEQ ID NO: 21)

24. The method of claim 21, wherein for the ADNF I polypeptide:

x is one;

R^1 is Val-Glu-Glu-Gly-Ile-Val-Leu-Gly-Gly-Gly (SEQ ID NO:6); and

y is zero. (SEQ ID NO: 22)

25. The method of claim 21, wherein for the ADNF III w and z are both zero. (SEQ ID NO: 2)

26. The method of claim 21, wherein for the ADNF III polypeptide:

w is one;

R^3 is Gly-Gly; and

z is zero. (SEQ ID NO: 23)

27. The method of claim 21, wherein for the ADNF III polypeptide:

w is one;

R^3 is Leu-Gly-Gly;

z is one; and

R^4 is Gln-Ser. (SEQ ID NO: 24)

28. The method of claim 21, wherein for the ADNF III polypeptide:

w is one;

R^3 is Leu-Gly-Leu-Gly-Gly (SEQ ID NO:7);

z is one; and

R^4 is Gln-Ser. (SEQ ID NO: 25)

29. The method of claim 21, wherein for the ADNF III polypeptide:

w is one;

R^3 is Ser-Val-Arg-Leu-Gly-Leu-Gly-Gly (SEQ ID NO:8);

z is one; and

R^4 is Gln-Ser. (SEQ ID NO: 26)

30. The method of claim 21, wherein x, y, w, and z are all zero. (SEQ ID NOS: 1 and 2)

31. The method of claim 21, wherein at least one of the ADNF polypeptide is encoded by a nucleic acid.

32. A pharmaceutical composition comprising a pharmaceutically acceptable excipient and a combination of an ADNF I polypeptide and an ADNF III polypeptide.

33. The pharmaceutical composition of claim 32, wherein the ADNF I polypeptide is a full length ADNF I polypeptide and the ADNF IIII polypeptide is a full length ADNF III polypeptide.

34. The pharmaceutical composition of claim 32 wherein:

(a) the ADNF I polypeptide has the following amino acid sequence: $(R^1)_x$-Ser-Ala-Leu-Leu-Arg-Ser-Ile-Pro-Ala-$(R^2)_y$ (SEQ ID NO:3); and

(b) the ADNF III polypeptide has the following amino acid sequence: $(R^3)_w$-Asn-Ala-Pro-Val-Ser-Ile-Pro-Gln-$(R^4)_z$ (SEQ ID NO:4);

wherein R^1, R^2, R^3, and R^4 are independently selected and are an amino acid sequence comprising from 1 to about 40 amino acids wherein each amino acid is independently selected; and

x, y, w, and z are independently selected and are equal to zero or one.

35. The pharmaceutical composition of claim 34, wherein for the ADNF I polypeptide x and y are both zero. (SEQ ID NO: 1)

36. The pharmaceutical composition of claim 34, wherein for the ADNF I polypeptide:

x is one;

R^1 is Val-Leu-Gly-Gly-Gly (SEQ ID NO:5); and

y is zero. (SEQ ID NO: 21)

37. The pharmaceutical composition of claim 34, wherein for the ADNF I polypeptide:

x is one; (SEQ ID NO: 22)

R^1 is Val-Glu-Glu-Gly-Ile-Val-Leu-Gly-Gly-Gly (SEQ ID NO:6);

and

y is zero. (SEQ ID NO:22)

38. The pharmaceutical composition of claim 34, wherein for the ADNF III polypeptide w and z are both zero. (SEQ ID NO:1)

39. The pharmaceutical composition of claim 34, wherein for the ADNF III polypeptide:

w is one;

R^3 is Gly-Gly; and

z is zero. (SEQ ID NO: 23)

40. The pharmaceutical composition of claim 34, wherein for the ADNF III polypeptide:

w is one;

R^3 is Leu-Gly-Gly;

z is one; and

R^4 is Gln-Ser. (SEQ ID NO: 24)

41. The pharmaceutical composition of claim 34, wherein for the ADNF III polypeptide:

w is one;

R^3 is Leu-Gly-Leu-Gly-Gly (SEQ ID NO:7);

z is one; and

R^4 is Gln-Ser. (SEQ ID NO: 25)

42. The pharmaceutical composition of claim 34, wherein for the ADNF III polypeptide:

w is one;

R^3 is Ser-Val-Arg-Leu-Gly-Leu-Gly-Gly (SEQ ID NO:8);

z is one; and

R^4 is Gln-Ser. (SEQ ID NO: 26)

43. The pharmaceutical composition of claim 34, wherein x, y, w, and z are all zero. (SEQ ID NOS: 1 and 2)

44. The pharmaceutical composition of claim 34, wherein at least one of the ADNF polypeptide is encoded by a nucleic acid.